Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A method for determining the presence or absence of a cancer in a patient, wherein the cancer is at least one of cervical cancer, breast cancer, ovarian cancer and lung cancer, the method comprising the steps of:

(a) determining the level of expression of hPygo2 gene as shown in SEQ ID NO:1 in a biological sample obtained from a patient, and

(b) comparing the level of hPygo2 gene expression in the biological sample to a predetermined cut-off value, to determine whether hPygo2 expression is higher in the biological sample;

therefrom determining the presence or absence of cancer in the patient.

2. (Currently amended) A method for monitoring the progression of a cancer in a patient, wherein the cancer is at least one of cervical cancer, breast cancer, ovarian cancer and lung cancer, the method comprising the steps of:

(a) determining the presence or absence of cancer in the patient according to the method of claim 1;

(b) repeating step (a) using a biological sample obtained from the patient at a subsequent time; and

(c) comparing the level of hPygo2 gene expression detected in step (b) to the level of hPygo2 gene expression detected in step (a); and therefrom monitoring the progression of the cancer in the patient.

3. (Previously presented) The method according to claim 1 wherein the predetermined cut-off value is the level of hPygo2 gene expression in a normal biological sample.

4. (Previously presented) The method according to claim 1 wherein the cancer is ovarian cancer, and the biological sample comprises epithelial ovarian cells.

5-7. (Cancelled)

8. (Previously presented) The method according to claim 1 wherein the level of hPygo2 gene expression is determined by the amount of hPygo2 protein.

9. (Cancelled)

10. (Currently amended) A kit for determining the presence or absence of a cancer, wherein the cancer is at least one of cervical cancer, breast cancer, ovarian cancer and lung cancer, in a patient according to the method of claim 1, the kit comprising a reagent capable of detecting hPygo2 protein ~~or mRNA~~ in a biological sample obtained from the patient, and instructions for using the reagent to determine whether the level of hPygo2 gene expression in the biological sample is higher compared to a predetermined cut-off value, and therefrom determining the presence or absence of cancer in the patient.

11 - 56. (Cancelled)

57. (Previously presented) The method according to claim 1 wherein the cancer is breast cancer, and the biological sample comprises mammary cells.

58. (Previously presented) The method according to claim 1 wherein the cancer is cervical cancer, and the biological sample comprises cervical cells.

59. (Currently amended) The method according to claim 8 wherein the level of hPygo2 protein is determined using an antibody specifically ~~reactive~~ immunoreactive to hPygo2 protein.

60. (Cancelled)

61. (Currently amended) The method according to claim 58 wherein the level of hPygo2 protein is determined using an antibody specifically ~~reactive~~ immunoreactive to hPygo2 protein.

62. (Previously presented) The kit according to claim 10 wherein the reagent is an antibody specifically reactive to hPygo2 protein.

63. (Cancelled)

64. (Previously presented) The kit according to claim 10 wherein the predetermined cut-off value is the level of hPygo2 gene expression in a normal biological sample.

65. (Previously presented) The kit according to claim 10 wherein the cancer is ovarian cancer, and the biological sample comprises epithelial ovarian cells.

66. (Previously presented) The kit according to claim 10 wherein the cancer is breast cancer, and the biological sample comprises mammary cells.

67. (Previously presented) The kit according to claim 10 wherein the cancer is cervical cancer, and the biological sample comprises cervical cells.

68. (Previously presented) The kit according to claim 67 wherein the reagent is an antibody specifically reactive to hPygo2 protein.

69. (New) The method according to claim 2 wherein the predetermined cut-off value in step (a) is the level of hPygo2 gene expression in a normal biological sample.

70. (New) The method according to claim 2 wherein the level of hPygo2 gene expression is determined by the amount of hPygo2 protein.

71. (New) The method according to claim 70 wherein the level of hPygo2 protein is determined using an antibody specifically immunoreactive to hPygo2 protein.

72. (New) The method according to claim 2 wherein the cancer is ovarian cancer, and the biological sample comprises epithelial ovarian cells.

73. (New) The method according to claim 2 wherein the cancer is breast cancer, and the biological sample comprises mammary cells.

74. (New) The method according to claim 2 wherein the cancer is cervical cancer, and the biological sample comprises cervical cells.

75. (New) The method according to claim 74 wherein the level of hPygo2 protein is determined using an antibody specifically immunoreactive to hPygo2 protein.

76. (New) The method according to claim 1 wherein the cancer is lung cancer, and the biological sample comprises lung cells.

77. (New) The method according to claim 2 wherein the cancer is lung cancer, and the biological sample comprises lung cells.

78. (New) The kit according to claim 10 wherein the cancer is lung cancer, and the biological sample comprises lung cells.